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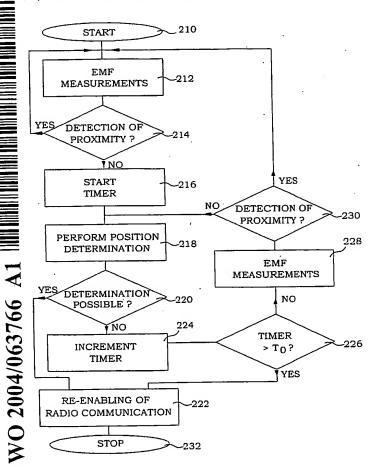
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(54) Title: ACTIVATION OF TRACKING DEVICE



(57) Abstract: A tracking device obtains container position information, which is communicated wirelessly to a remote site. It is determined if the container is in proximity to an aircraft by detection of electromagnetic fields, and if so, the communication is disabled. Re-enabling of the communication is allowed if simultaneously no electromagnetic fields are detected and the tracking device is able to determine a container position. Re-enabling is also allowed if the lack of characteristic electromagnetic fields has lasted for a time period exceeding a predetermined value. This predetermined value is preferably larger than a maximum flight time from a globally most remote flight position. Alternatively, the predetermined value is larger than a maximum flight time on battery backup. The positioning information is preferably performed using GPS positioning. The detection comprises detection of electromagnetic field frequencies in the range of 400 Hz.



SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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A. CLASSIFICATION OF SUBJECT MATTER						
IPC7: G01S 5/14, G01S 5/00 According to International Patent Classification (IPC) or to both i	national classification and IPC					
B. FIELDS SEARCHED						
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IPC7: G01S, G08B						
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched						
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Electronic data base consulted during the international search (nar	ne of data base and, where practicable, searc	h terms used)				
EPO-INTERNAL, WPI DATA, PAJ, INSPEC		: :				
C. DOCUMENTS CONSIDERED TO BE RELEVANT	·					
Category* Citation of document, with indication, where a		Relevant to claim No.				
X US 2002017989 A1 (IAN J. FORSTE 14 February 2002 (14.02.02) paragraphs [64]-[68]	US 2002017989 A1 (IAN J. FORSTER ET AL), 14 February 2002 (14.02.02), figure 7, see paragraphs [64]-[68]					
A US 2001052850 A1 (HARRY I. ZIMI 20 December 2001 (20.12.01) [17]-[19], [32]-[33]	US 2001052850 A1 (HARRY I. ZIMMERMAN), 20 December 2001 (20.12.01), see paragraphs [17]-[19], [32]-[33] EP 0984418 A2 (N.V. NEDERLANDSCHE APPARATENFABRIEK NEDAP), 8 March 2000 (08.03.00), see the whole document					
NEDAP), 8 March 2000 (08.0						
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X Further documents are listed in the continuation of B	ox C. X See patent family ann	ex				
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International application No.
PCT/SE 03/00011

C (Continu	ation). DOCUMENTS CONSIDERED TO BE RELEVANT	
Category*		Relevant to claim No.
Α .	US 2002057192 A1 (JAMES G. EAGLESON ET AL), 16 May 2002 (16.05.02), see paragraph [144]	1-14
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Form DOTH	SA/210 (continuation of second sheet) (July 1998)	





INTERNATIONAL SEARCH REPORT Information on patent family members

29/06/03

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Patent document cited in search report			Publication date		Patent family member(s)	Publication date
US	2002017989	A1	14/02/02	US AU EP US WO	2003006900 A 4668701 A 1287376 A 6281797 B 0175472 A	09/01/03 15/10/01 05/03/03 28/08/01 11/10/01
US	2001052850	A1	20/12/01	US US	6342836 B 6265975 B	29/01/02 24/07/01
EP	0984418	A2	08/03/00	NL	1010007 C	00/00/00
US	2002057192	A1	16/05/02	AU EP WO US	9454301 A. 1317733 A 0221429 A 6542114 B	22/03/02 11/06/03 14/03/02 01/04/03